

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN (BBPECP)			
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Author:	Margaret E Robinson, Director of Public Health Nursing		
Divisions:	All		

PURPOSE

In accordance with the OSHA Regulations (Standards - 29 CFR) Bloodborne Pathogens - 1910.1030, Appendix A (Federal Register 01/18/01), Compliance Directive CPL 2-2.44D (11/5/99), and the VOSHA Safety and Health Standards for General Industry (29CFR1910), this exposure control plan has been developed, including the Appendices listed at the end of this document.

At a minimum, this document will be reviewed annually by the Director of Public Health Nursing or designee and updated as appropriate.

DEFINITIONS

DisCide – Ultra Disinfecting Towelettes, MSDS Sheet:

http://portal.ecolab.com/servlet/PdfServlet?sid=914400&cntry=US&langid=en-US&langtype=RFC1766LangCode&locale=en_US&pdfname=DISCIDE+ULTRA+DISINFECTING+TOWELETTES

OPIM - Other Potentially Infectious Materials;

OSHA – Occupational Safety and Health Administration, <https://www.osha.gov/>

Standard Precautions - Standard Precautions include a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include: hand hygiene; use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure; and safe injection practices. Also, equipment or items in the patient environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for direct contact, contain heavily soiled equipment, properly clean and disinfect or sterilize reusable equipment before use on another patient).

The application of Standard Precautions during patient care is determined by the nature of the healthcare worker patient interaction and the extent of anticipated blood, body fluid, or pathogen exposure. See Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007 found at <http://www.cdc.gov/hicpac/pdf/isolation/isolation2007.pdf> for more specifics.

Body fluids to which standard precautions apply are blood, semen, vaginal secretions, breast milk, synovial fluid, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Regulated Waste - Regulated waste is liquid or semi-liquid blood or other potentially infectious materials; contaminated items that release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

LMS – AHS Learning Management System

VOSHA – Vermont Occupational Safety and Health Administration,
<http://labor.vermont.gov/vosha/>

PROCEDURE

Exposure Determination

Appendix 2 lists positions at the Vermont Department of Health that have been identified as Having potential occupational exposure. Appendix 2 also lists tasks and procedures in which occupational exposures may take place. By performance of the tasks and duties listed, it may reasonably be anticipated that an employee may be occupationally exposed to blood or OPIM by one or more of the following routes: Skin, eye, mucous membrane and parenteral exposure.

Practice Controls

Annually, the Director of Public Health Nursing or designee will review the use of engineering controls, consider new technologies that have become available, and review any “Deviation from Standard Clinical Practice forms” for patterns. Assessment of possible need for redesign of workplace practices and/or adoption of alternate safety products will be conducted with changes implemented when determined appropriate.

- A. Prevention remains the primary strategy for reducing occupational bloodborne pathogen infections. Hepatitis B Vaccination is available at no cost to all employees who are reasonably anticipated to have skin, eye, mucous membrane, or parenteral exposure.
- B. Hand Hygiene - “Hand hygiene has been cited frequently as the single most important practice to reduce the transmission of infectious agents in healthcare settings and is an essential element of Standard Precautions. The term “hand hygiene” includes both hand washing with either plain or antiseptic-containing soap and water, and use of alcohol-based products (gels, rinses, foams) that do not require the use of water. In the absence of visible soiling of hands, approved alcohol-based products for hand disinfection are may be used

over antimicrobial or plain soap and water.

http://www.cdc.gov/ncidod/dhqp/gl_isolation_standard.html). Hand sanitizers should contain 60-90% isopropyl solution or ethanol alcohol in foam, gel, or rinse.

- Hand hygiene is required before and after contact with each client and between clients.
- Employees shall perform hand hygiene immediately or as soon as possible after removal of gloves.
- It is important to perform hand hygiene after removing gloves and before touching anything, including pens, light switches, faucets, and door knobs.
- Failure to adhere to this instruction necessitates that all contaminated items and surfaces be cleaned with a 1:10 bleach solution.

C. Safety Devices - Safety syringes, retractable lancets, and safety venipuncture equipment are to be used by Health Department employees to carry out their clinical responsibilities. Safety equipment will be used according to equipment instructions.

D. Personal Protective Equipment – Regulations (Standard - 29CFR) bloodborne pathogens 1910.1030d(3)(I)Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, or other ventilation devices.

Personal protective equipment will be considered 'appropriate' for protection against BBP only if it does not permit blood or potentially infectious material to pass through to reach the employee's work clothes, street clothes, undergarments, skin eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

E. Gloves – The Vermont Department of Health requires that gloves be worn at all times when coming in contact with blood or OPIM.

- Gloves shall be worn when the employee's hands may have direct skin contact with blood, OPIM, mucous membranes, or non-intact skin.
- Gloves shall also be worn when the employee handles items or surfaces soiled with blood or OPIM.
- Gloves are to be changed between clients.
- Gloves shall be replaced as soon as possible when visibly soiled, torn, punctured, or when their ability to function as a barrier is compromised.

- Gloved hands that have had contact with clients or specimens are considered soiled.
 - Remove gloves and perform hand hygiene prior to touching ANYTHING, including pens, light switches, faucets, and door knobs.
 - Failure to adhere to this instruction necessitates that all contaminated items and surfaces be cleaned with a the appropriate disinfection solution.
- Gloves are optional when administering intramuscular or subcutaneous injections as long as bleeding is not anticipated.
- Gloves are not optional when the health care professional has scratches, cuts, or other breaks in skin integrity to his/her hands.
- Gloves are **always required** for phlebotomy, lead screening and invasive hemoglobin screening.

F. Other Protective Measures - Employees administering immunizations, tuberculin skin testing or performing phlebotomy tests will not wear open toe shoes. Eating, drinking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a potential for occupational exposure. Food and drink will not be stored in refrigerators, freezers, or cabinets where blood or OPIM are stored or in other areas of possible contamination. All procedures involving blood or OPIM will be performed in such a manner as to minimize splashing, spraying, and aerosolization of OPIM substances.

Sharps Containers and Safe Disposal of Sharps

Sharps consist of, but are not limited to, needles, syringes, lancets, HemoCues® cuvettes, venipuncture equipment, and sharp cutting objects that come into contact with client's body fluids. They should be considered as potentially infective after use and be handled with extraordinary care to prevent accidental injuries. Immediately after use, sharps should be placed directly into sharps containers for safe storage.

Sharps containers shall be easily accessible to personnel and located in the immediate area of use. Sharps containers shall be replaced routinely and should be closed and locked when the box is $\frac{3}{4}$ full. When filled containers are awaiting shipping, they should be stored in a box clearly labeled with the biohazard stickers. Do not store filled containers on top of refrigerators or on the top shelves of storage areas.

Immediately after use, sharps should be placed directly into sharps containers for safe storage.

See Appendix 4, "Safe disposal of vaccines, sharps containers and Regulated Waste".

Safe Disposal of Medical and Regulated Waste (non-sharps)

Dispose of any blood contaminated non-sharp item used in the procedure (disposable gloves, gauze, Band-Aid®, alcohol swab, etc.) in a plastic-lined wastebasket. Double bagging and

incineration are not necessary. However, the contaminated materials should be disposed of either at the clinic site (covered trash container) or returned to the Health Department for disposal.

If the contaminated items are soaked/caked in blood or OPIM, it is considered "regulated waste" and must be disposed of in an labeled bag in an appropriate manner. See Appendix 4, "Safe disposal of vaccines, sharps containers and Regulated Waste" for details on how to appropriately dispose of Regulated Waste.

Broken glassware, which may be contaminated, shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dustpan, or forceps. Broken glassware once cleaned up should be safely disposed in a manner to avoid creating any potentially hazardous situations.

Cleaning Clinic Work Surfaces & Non-Porous Equipment

Dental Hygienists working for the Vermont Department of Health may use DisCide products to clean all surfaces in the clinic area. All other Health Department staff should use Oxivir to clean all clinic work surfaces and equipment. Oxivir will be ordered through the Health Department standard supply ordering process.

- All clinic work surfaces and equipment shall be wiped clean with Oxivir or DisCide between clients if contaminated with blood or OPIM.
- Work surfaces must be cleaned when they become visibly contaminated.
 - First, the visible spill must be wiped up with a paper towel.
 - Then the paper towel must then be properly disposed.
 - Next, wipe the surface down with the solution.
- Work surfaces and equipment shall be wiped clean with Oxivir or DisCide when employees leave the area for lunch or breaks and at the end of the clinic day.

Communication of Hazards/Transportation of Hazards

1. Communication of Hazards - Warning labels shall be affixed to containers of infectious waste, refrigerators and freezers containing blood and OPIM, and other containers used to store or transport blood or OPIM. Use adhesive-backed labels supplied for this purpose. Labels shall be fluorescent orange or orange-red with letters or symbols in a contrasting color.
2. Transportation of Hazards – See Appendix 4.

Training - All employees with potential occupational exposure will participate in BBPEC training at the time of their initial employment. Training will occur at least annually thereafter and whenever there is a change in work practices or procedures involving potential exposure of employees to bloodborne pathogens or chemical hazards. It is recommended that support staff receive basic training on bloodborne pathogens to make them aware of the possible

risks in the workplace.

The Supervisor, District Director or designee will conduct the training in each district office following the outline in Appendix 3a. Attendance will be recorded in the AHS Learning Management System and on an attendance sheet. Documentation and training records will be kept in the either the employees District Office or their Division for 5 years from the date on which the training occurred.

Vermont Department of Health BBPEC Training is outlined in Appendix 3a. Components contained in the training must include:

1. Information about the location of the written Bloodborne Pathogen Exposure Control Plan as well as any applicable VOSHA standards.
2. An explanation of this Bloodborne Pathogens Exposure Control Plan, including an explanation of applicable chemical hazards (bleach).
3. Information about the hepatitis B vaccine, including information on its efficacy, safety, and the benefits of being vaccinated.
4. Information about the appropriate actions to take and persons to contact in the event of an emergency.
5. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
6. An explanation of the hazardous labels used in the department.
- *7. A general explanation of the epidemiology and symptoms of bloodborne diseases.
- *8. An explanation of the modes of transmission of bloodborne pathogens.
- *9. An explanation of the appropriate methods for recognizing tasks and activities that may involve exposure to blood and OPIM.
- *10. An explanation of the use and limitations of practices that can prevent or reduce exposure, including appropriate engineering controls, work practices, and personal protective equipment.
- *11. An explanation of the basis for selection of personal protective equipment.

** Items 7–11 above are covered in the OSHA-approved training DVD. Three copies of the DVD are available and will circulate between district offices.*

Emergency Actions

All incidents involving exposure to blood or OPIM are considered emergencies and are to be reported immediately by the exposed or potentially exposed employee to his/her supervisor. The Supervisor/District Director will assist staff involved in the incident to follow the procedures currently in place.

Blood or OPIM Exposure - See also Appendix 8 and 9 for more information

The employee must immediately wash or flush (depending on site) the affected area with soap and water. Caustic substances such as bleach must not be used. If an employee **does not need additional medical services**, complete the State Employee Injury Reporting form at http://bgs.vermont.gov/workers_comp/injury .

If an employee is **injured and additional medical services are needed**, the employee should immediately seek medical care and the employee's Supervisor can coordinate with the employee to assure that the State Employee Injury Reporting form is completed within 24 hours.

The Director of Public Health Nursing and the Division Director should be notified about any incident on the day that it happens or as soon as feasible thereafter.

Provide the following information to the health care provider in the ED who will evaluate the exposed employee:

- a. Partially completed "Checklist for Needle stick/ Sharps Injury" (BBP Appendix 5) if applicable
- b. Partially completed "Employee's Claim and Employer First Report of Injury form" (AHS intranet)
- c. "ED Report of Post-Exposure Incident" (BBP Appendix 6)

Supervisors of Employees at risk for BBP Exposure, or other designated Health Department staff who may be in positions of authority during a possible BBP exposure are responsible for the following:

- Informing staff of appropriate procedures in place for emergency situations.
- Complete the supervisor's section of the AHS Incident/Injury form and assure that it is submitted electronically to AHS Personnel. There is no need to obtain the employee's current hepatitis B, hepatitis C, or HIV status (baseline testing is recommended on the day of the incident at the Emergency Department if the incident involved Blood or OPIM exposure or possible exposure).
- Referencing the employee's documented hepatitis B vaccination titer history from Health Department records if possible exposure to blood or OPIM occurred.
- Assuring that a medical evaluation of the employee by a health care provider is arranged immediately by calling the local Emergency Department. The injured employee should proceed promptly to local Emergency Department for evaluation and treatment. Possible testing and HIV PEP may be determined necessary by the Emergency Department physician.
- Understanding that all evaluations, procedures, vaccinations, and post exposure management will be provided at no cost to the employee and will follow the current recommendations from the U.S. Public Health Service or other current authority, including evaluation for HIV post exposure prophylaxis (see Appendix 8).
- Source client (exposure source) bloodwork for HIV and Hepatitis B and C may be drawn at the District Office, with the individual's signed Informed Consent or it may be done at the individual's provider office. Source client's results shall be

sent only to the source's health care provider. All efforts to get the source client to complete a consent form to have their primary care provider share health information with the employee's primary care provider should be made. The source client should be counseled not coerced into completing the consent form.

- Notification of the Director of Public Health Nursing and/or the Division Director of the exposure incident and sending a copy of AHS Employee Incident/Injury Report. The Director of Public Health Nursing may conduct an assessment of potential work practice changes.

Healthcare Provider:

Healthcare providers should be encouraged to collect blood specimen for baseline testing of the exposed employee. If blood tests for hepatitis B, hepatitis C, and/or HIV are not done initially, the provider must request that the laboratory maintain the employee's blood sample for 90 days in case the employee changes his or her mind about testing. As part of the employee's medical evaluation, the following resources should be consulted for the latest information on post exposure prophylaxis and general management.

- **National Clinicians Post exposure Hotline:** 888-448-4911 (staffed by physicians 24 hours/7 days per week)
- **FAHC Infectious Disease practice:** (802) 847-4594. One of the doctors is always on call when the office is closed.

The Healthcare provider should counsel the employee about the incubation period, methods of transmission, and prevention of transmission of hepatitis B, hepatitis C, and HIV. Review results of the exposure source's lab work when obtained from the exposed employee's primary health care provider (if source individual has signed informed consent). Confidentiality shall be maintained with respect to the source individual's identity and test results. Exposure source's name will not be recorded with the exposed employee's records.

The physician or healthcare provider seen needs to complete two forms.

1. Complete the "ED Report of Post-Exposure Incident form" and return to the employee who should give it to their Supervisor and
2. Complete the Medical section of the "Employee's Claim and Employer First Report of Injury form".

Recordkeeping

Confidentiality of related records will be maintained in accordance with State of Vermont policies. The requirement to handle the employee health record in a fashion that is compliant with HIPAA and other applicable state and federal regulations should be a priority.

Authorization for release of the health records contained in the record to the assessing/treating health care professional should be required and documentation or the authorization (or its refusal) should be retained in the record. A record will be established and maintained for each employee with an occupational BBP exposure. It will be stored in the District Office's or Divisions' centralized records of employee health, consistent with the Recordkeeping provisions of State Personnel Policy #17.5. These records shall be kept separate from the employee's

official personnel file for at least the duration of employment plus 30 years in accordance with VOSHA requirements. These records shall include:

- a. Employee name and date of birth
- b. A copy of the employee's hepatitis B vaccination/titer status (including dates) and/or a copy of the Hepatitis B Vaccine Declination form.
- c. A copy of the health care professional's written opinion of evaluation following an exposure incident (ED Report of Post Exposure Incident form).
- d. Results of any examinations, medical testing, and follow-up procedures in accordance with post-exposure evaluation and follow-up.
- e. Copies of information given to the health care professional to include: a copy of the federal regulations on BBP, a description of the exposed employee's duties relating to the exposure incident, documentation of the route and circumstances under which the incident occurred, results of the source individual's blood testing if available, and all relevant medical records regarding the treatment of the employee.

Information regarding the circumstances of the exposure incident (AHS Incident/Injury Report and the Deviation from Standard Clinical Practice form) will be maintained separately by Vermont Department of Health's Director of Public Health Nursing.

FURTHER INFORMATION

Centers for Disease Control and Prevention. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. MMWR 2001;50(No. RR-11); <http://www.cdc.gov/mmwr/PDF/rr/rr5011.pdf>

Centers for Disease Control and Prevention. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for Postexposure Prophylaxis. MMWR 2005;54(No. RR-9); <http://www.cdc.gov/mmwr/PDF/rr/rr5409.pdf>

Department of Labor Occupational Safety and Health Administration, <https://www.osha.gov/law-regs.html>